STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	/0/ <i>5</i> 34.099
Source:	P4710
Date Processed by STIC:	5//6/05
2	

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.2.2 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<u>http://www.uspto.gov/ebc/efs/downloads/documents.htm></u>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05



PCT

RAW SEQUENCE LISTING DATE: 05/16/2005
PATENT APPLICATION: US/10/534,099 TIME: 12:07:15

Input Set : E:\UTSC772US.APP.txt

```
3 <110> APPLICANT: DE CROMBRUGGHE, BENOIT
             AKIYAMA, HARUHIKO
      6 <120> TITLE OF INVENTION: HA4, A NEW OSTEOBLAST- AND CHONDROCYTE-SPECIFIC SMALL
              SECRETED PEPTIDE, COMPOSITIONS AND METHODS OF USE
      9 <130> FILE REFERENCE: UTSC:772US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/534,099
     12 <141> CURRENT FILING DATE: 2005-05-06
                                                               pp 3,6
     14 <150> PRIOR APPLICATION NUMBER: PCT/US2003/035139
     15 <151> PRIOR FILING DATE: 2003-11-04
     17 <150> PRIOR APPLICATION NUMBER: 60/423,690
     18 <151> PRIOR FILING DATE: 2002-11-04
     21 <160> NUMBER OF SEQ ID NOS: 3
     23 <170> SOFTWARE: PatentIn Ver. 2.1
     25 <210> SEQ ID NO: 1
     26 <211> LENGTH: 735
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     27 <212> TYPE: DNA
                                                             Corrected Diskette Needer
     28 <213> ORGANISM: Artificial Sequence
     30 <220> FEATURE:
     31 <221> NAME/KEY: CDS
     32 <222> LOCATION: (1)..(735)
     34 <220> FEATURE:
     35 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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     40 Met His Pro Gln Gly Arg Ala Ala Pro Pro Gln Leu Leu Gly Leu
                                             10
     43 ttc ctt gtg ctg ctg ctt cag ttg tcc gca ccg tcc agc gcc tct
                                                                          .96
     44 Phe Leu Val Leu Leu Leu Gln Leu Ser Ala Pro Ser Ser Ala Ser
     45
                     20
                                         25
                                                                          144
     47 gag aac ccc aag gtg aag caa aaa gcg ctg atc cgg cag agg gag gtg
     48 Glu Asn Pro Lys Val Lys Gln Lys Ala Leu Ile Arg Gln Arg Glu Val
                 35
                                     40
                                                                          192
     51 gta gac ctg tat aat gga atg tgt cta caa gga cca gca gga gtt ccc
     52 Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly Val Pro
                                 55
     55 ggt cgt gat ggg agc cct ggg gcc aat ggc att cct ggc aca cct ggc
     56 Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr Pro Gly
     57 65
                                                                          288
     59 atc cca ggt cgg gat gga ttc aaa ggg gaa aag gga gaa tgc tta agg
     60 Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys Leu Arg
                                             90
     63 gaa agc ttt gag gag tcc tgg acc cca aac tat aag cag tgt tcg tgg
```





TIME: 12:07:15

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

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67 agt	tcg ct	g aac	tat	ggc	ata	gat	ctt	ggg	aaa	att	gcg	gag	tgt	aca	384
68 Ser	Ser Le	ı Asn	Tyr	Gly	Ile	Asp	Leu	Gly	Lys	Ile	Ala	Glu	Cys	Thr	
69	11!	5				120					125				
71 ttc															432
72 Phe	_	Met	Arg	Ser	Asn	Ser	Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	
	130				135					140					
75 tca															480
76 Ser	Leu Ar	J Leu	Lys	_	Arg	Asn	Ala	Cys	_	Gln	Arg	Trp	Tyr		
77 145				150					155					160	
79 aca															528
80 Thr	Phe Asi	л GIУ		Glu	Cys	Ser	GLy		Leu	Pro	Ile	Glu		Ile	
81			165					170					175		576
83 atc															576
84 Ile 85	туг ье		GIII	стА	ser	Pro		ьeu	Asn	ser	Thr		Asn	TTE	
	aat aa	180	+ 0+	~+~	~~~	~~~	185	+~+	~~~	~~~	~++	190	~~+	~~~	624
87 cat 88 His	Ara Th		COL	gra	gaa	gga	Tou	Cur	gaa	999	att	ggt	gct	gga	624
89	19!		ser	Val	GIU	200	пеп	Суѕ	GLu	GTÀ	205	СТУ	Ата	GIY	
91 ttg			acc	atc	taa		aac	300	tat	tos		tac	000	222	672
92 Leu															072
	210	, vai	mu	110	215	vu.	OLY	1111	Cys	220	пор	1 7 1	110	цуз	
95 gga		tet	act	gga		aat	tcc	ata	tct		atc	atc	att	gaa	720
96 Gly															, 20
97 225				230					235					240	
99 gaa	cta cc	ı aaa	taa												735
100 Glu															
104 <21	0> SEQ	ID NO): 2												
105 <21	1> LENG	STH: 2	244							•					
106 <21	2> TYPI	E: PR	r												
107 <21			: Art	ific	cial	Sequ	ience	9							
109 <22															
110 <22			FORM	OITA	1: D∈	escri	iptic	on of	Art	ific	cial	Seq	1ence	e: Syn	thetic
111	Pep		_										•		
113 <40										_	_			_	
114 Met		o Gli	n Gly	Arc	g Ala	a Ala	a Pro			ı Leı	ı Leı	ı Leı	_	-	
115 1			- 5	_	_	1	_	10		_	_	_	1!		
116 Phe	Leu Va			ı Let	ı Let	ı Gli			: Ala	a Pro	Sei			a Ser	
117	7 am D	20		T	. (1.	. T	25		1.	70	- 01-	30		. 17 1	
118 Glu 119			s val	г глаг	GII	ту	S Ala	а тег	1 TTE	e Arc		_	g GII	ıvaı	
	_	35	~ 7\a~		. Mat	40) . To:		. cı.	. D~	45	-	. 175	1 D~a	
120 Val 121	50 v		L ASI	ı GT]	/ мет 5.5	_	ь пег	ı GTI	r GT?	7 PIG		י הדי	y va.	r Pro	
121 122 Gly			, 90	- D~-		•	. Ac-	C1.	, Tla			, ጥኤ	r Dr	- C1++	
122 GIY	_	'b GT	A SET	. FIC	_	, TTC	ı Məl	· AT	7 116		, GT	, T111	r ET(80 80	
		_	_		•		- 61-						- T		
	Pro G1	V Are	y Aar) (31 t	, Pha	7 777	ξ (~ `	7 (≟!1	1 .179	: (→ ₹	/ (⇒!1		3 1.621	1 Arg	
	Pro Gl	y Aro			/ Phe	э гуу	נדט פ	9 GIV	_	3 GTZ	/ GII	и су:		-	
125 126 Glu			85	5		_		90) _			_	95	5	





TIME: 12:07:15

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

```
127
                     100
                                         105
                                                              110
     128 Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu Cys Thr
                 115
                                     120
     130 Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe Ser Gly
     131
                                 135
                                                      140
     132 Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp Tyr Phe
     133 145
                             150
                                                  155
     134 Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile
                         165
                                              170
     136 Ile Tyr Leu Asp Gln Gly Ser Pro Glu Leu Asn Ser Thr Ile Asn Ile
     137
                     180
                                         185
     138 His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly
     139
                 195
                                     200
     140 Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys
     141
                                 215
                                                      220
     142 Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu
     143 225
                             230
                                                  235
     144 Glu Leu Pro Lys
     148 <210> SEQ ID NO: 3
     149 <211> LENGTH: 20138
     150 <212> TYPE: DNA
     151 <213> ORGANISM: Artificial Sequence
     153 <220> FEATURE:
     154 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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     157 <220> FEATURE:
    158 <221> NAME/KEY: modified_base
159 <222> LOCATION: (265)..(18755) 18855 (\rho.6)
     160 <223> OTHER INFORMATION: N = A, C, G or T/U
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     165 atcttgctct attttttct ttgtgaaaaa acacagactg aacccctacc ccagattaga 180
     166 accggatctg gaccctttca atcattagtt agtgggtcct tccattttac catggcataa 240
W--> 167 gaattagaag taactggatg ccagnggcaa tccgctgcag actgaccttt aatatcagtt 300
     168 tgcaaaaaat ttagaacaaa taaggcaaag gcaagatgtg cctttggtga ctttggggga 360
     169 tataactgcc cetgttttgt ctaaaaaggc cagaaactct ctggaagtgg aggctgtgct 420
    170 ctaaattaac ttgctaggta attaagaatt ttagctatct acaatatgaa tctctaatat 480
    171 tggactaaat attagaccag tccaagattg aataactggt cacactgaag aaaagagaaa 540
     172 aatcattatg actctattaa atgactaatc ttactaagtc agattatagt ctctgatgtt 600
    173 cttttgccat aaagttaaaa ggcttgaagc tagtccaaac tagaaaaatg gcaagcaaag 660
    174 atgggtctaa aacatgtacc caatttagtt tcctagtcac ttcaatcagg gcactgagtc 720
    175 aactcacctg ccagctcatc acacgaatta accatcatgc ttctatagca ttctgtggag 780
    176 agaacctatg tttttccctt ccctaataag gtagcagttt aggataaaac cataagccaa 840
    177 taagtagatc tttttaagat actataaagc atttattaaa ttctttgaca tctaaatttc 900
    178 aaaattcaaa aataaaagta tqatttaaat agtgtgcacg ggaatgtact aaataatatg 960
    179 cacggggata taatttcccc cttctttgtc ttttaagaag ctaaagtttt aaagtttcac 1020
    180 aatatctagt ccttagaatt aataacttgt tgacaaaaca tctcaaatac ttgactgtat 1080
    181 tcatgtaaca aaggcagtga ctaattgcac tttcaattgt ttttcttaag gagcagttgt 1140
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TIME: 12:07:15

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

182	aactagaaag	cttgaaaagt	tattaatagt	cacatgtgca	taatttattt	atttactaga	1200
183	aataagagta	tttatttgca	gcaatttatt	aagtaaaggt	cctcaagaat	taacactatt	1260
184	atgtggaaac	aagtagtaac	tgaggacact	aagaggaaag	aattatacat	gcacaatttt	1320
185	caagaatact	aaaatattat	cttaaaccat	aactgctttg	aatatacaaa	gaacaaggtt	1380
186	atatattcaa	tctatcttat	atgtacgacc	tatagactgc	ctgagatata	aatttagcat	1440
		taagatgtcc					
		gacagcattt					
		agcatctgag					
		taatatacaa					
		tagattatct					
		cacatgtact					
		tgtatgaatt					
		gatattgatt					
		gtaataacca					
		ttgtttttt					
		tctatagccc					
		aatccacctg					
		tattagtcag					
		acaattcttt					
		aaaaccacct					
		ggcancccaa					
		aggctcatgg					
		ccttggcggc	_	_			
		cacagcagcc					
		aaatgacttt					
		taattaccat					
		cttctgtagt					
		gagagcaagg					
		cttaggaaac				-	
		tgataaaaat			-		
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213	aaaggagaga	gaaaaagaaa	caaactttca	gatctataat	aactatataa	aaggtaggca	3060
214	agccagattg	taatgccttg	ataaattata	cagtctgatt	gaccctttat	aaactctaaa	3120
215	tttgaacttt	attaaaacaa	catctggcta	gatccgtaaa	ggtgctcttt	tagctaaaag	3180
216	aatatctcct	ggtttgcaag	acaaaggaaa	gtcacacaaa	ccgaacagaa	gctgctctga	3240
217	gcttagttcc	tcttgccatg	aggacatata	ttagaattac	taagtttctt	ttgcaccatt	3300
		aagtaaaact					
		atacattgcg					
		tttaaggcta					
		agctgattgt	_	_			
		agaccaatca					
		tttgccaaat					
		ttttttaccc					
		ccagcagggg					
		ctttgatgaa					
		aacattcatt					
		tgcacccaaa					
		caaagcagcg					
		cagtttctaa					
230	ccacacgacg	cayciccida	cryryyccat	ccaccigail	attaaattccc	ıııaıladd	4000





TIME: 12:07:15

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,099

Input Set : E:\UTSC772US.APP.txt

			aaaaaagca				
			agtgaattta				
			tacgaatttt				
			caaatgtcct				
235	caatctgttg	aggccagcca	gcggcccaca	tgtctgggtt	ctagcctggg	aggtatcttg	4380
236	gaatctggaa	gagaagaggg	aactaggcgg	ctcgagagag	aatggaacga	taatggaacc	4440
237	aagacatcag	tctgatcaag	gttcaatttt	actatttgga	gacactgggt	tatgaagtag	4500
238	agggagggc	ccattcctgc	caaatcatcc	ttggagtcca	gtttcaggtg	accacgtgtt	4560
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240	gctctnttag	ccctaacagt	caaacctgat	cagccagatt	tcaggctggg	ggggaggtta	4680
241	caatatttgt	tggtcttttt	ttcatgcagc	ttttgggggg	gggttgtttt	gttttgtttt	4740
242	attgagacag	gaatttgctg	tgtagccttt	attgtcttgg	aatttgctct	gtaaactagg	4800
243	ctgtccatga	actcacagag	atctacctgc	ctttgcctcc	ctagtgctgg	ggttaaaggt	4860
244	gttcaccacc	accacctage	ccataatctc	atattctatc	aagggattta	ggttccataa	4920
245	atgcacttat	cataagaggt	tccaacagat	ggaacacaac	tacacagtat	aaggtggact	4980
246	aatacatgtg	tgtccttggt	gaagaatccc	ttatcttatg	tcctttcatg	tgcttgcttt	5040
247	atcaaaacat	cctttcacct	gtgtctgctt	taggataaca	ctccttcaca	tgtttgccac	5100
			gactgacttt				
			taagaaaatt				
			tcttctcctt				
			ggatgttttg				
			ttcttctacc				
	_	_	gaagcttgcc				
	_		gtttggggtc		_		
			cacatattcc				
			tgtagagtca				
			aagttactcc				
		_	tgťacttatt				
			ttatattcat				
			tgtcaagtag				
			tactcaaaat				
		_	tcccaagggc				
			tggtttctga				
			attaggaaca				
			ccagttcctc	-			
			atagacttct				
			gctgtgttaa				
			ggttggtggg				
			ctgtaggttc				
			ggaggaaagt				
			tagggctgag				
			tagcccacct				
273	ccagggagtg	ccaactaasa	ttgggggtgg	agggtaggag	agggcaatga	ataggagaaa	6660
			ctgtgggatc				
			agctcaggat				
			tccctctccc				
			ttggaggctg				
			tgaaataagc				
			cagttcacct				
213	cygotattit	Jeaceageet	cagettacet	acguacygag	accodagget	gourograde	, 520

10/534,099

last "n" in Sequerce 3



RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/534,099

DATE: 05/16/2005 TIME: 12:07:16

Input Set : E:\UTSC772US.APP.txt

Output Set: N:\CRF4\05162005\J534099.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:3; N Pos. 18614,18619,18632,18633,18634,18635,18636,18637,18638,18639
Seq#:3; N Pos. 18640,18641,18642,18643,18644,18645,18646,18647,18648,18649
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Seq#:3; N Pos. 18660,18661,18662,18663,18664,18665,18666,18667,18668,18669
Seq#:3; N Pos. 18670,18671,18672,18673,18674,18675,18676,18677,18678,18679
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/534,099

DATE: 05/16/2005 TIME: 12:07:16

Input Set : E:\UTSC772US.APP.txt

Output Set: N:\CRF4\05162005\J534099.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:240

M:341 Repeated in SeqNo=3